

Wilsonville facility would turn food scraps to energy

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The Portland area could get its first "digester," which would convert banana peels, coffee grounds and other food waste into renewable energy.

An anaerobic food digester proposed in Wilsonville would be designed to process 50,000 to 70,000 tons of commercial food waste per year. The facility would collect methane from decomposing food scraps and convert it to electricity.

"This is nothing new or cutting edge or innovative. It's technology that's been around for a long time," says Paul Woods, president of Sustainable Organics Recycling Technology Bioenergy, which hopes to build the facility.

The closest anaerobic food digester to Portland is in Junction City, in Lane County. A similar project proposed by Columbia Biogas in Northeast Portland died due to lack of financing.

Woods, who founded SORT Bioenergy last year, says he has financing lined up for the project, "contingent upon local and state permit approval as well as approval of a franchise agreement from Metro that would include a long-term feedstock supply agreement."

SORT's Wilsonville facility would mix thousands of gallons of food waste with water and bacteria in a container about 30 feet high and 70 feet in diameter. Keeping the mix at an even 96 degrees Fahrenheit creates the optimal environment for the bacteria to partially break down the food into methane.

The methane would be collected and then fed into an onsite generator that creates electricity sold to Portland General Electric. In total, the facility would produce 2.4 megawatts of electricity per hour, 24 hours per day.

SORT's site is adjacent to Republic Services' Wilsonville campus, which includes a garbage transfer center. SORT would work with Republic to help transport commercial waste to and from the facility. Republic could use methane produced at the facility to power some of its truck fleet.

Processing food scraps reduces the need for landfills, and produces usable energy and agricultural fertilizer. Since the digester is anaerobic and airtight, that prevents the kind of unpleasant odors that have plagued the Nature's Needs facility in North Plains, an open-air site where residential food scraps are composted.

"It's completely enclosed," Woods says. "There are no emissions from the tank."

Metro, the Portland-area regional government, has made it a high priority to shrink the amount of food waste sent to landfills. Anaerobic digesters like SORT's could be one way to address that goal, says Metro spokesman Ken Ray.

"We're looking at ways to reduce the amount of garbage that we throw away, and one of the most significant ways we can have an impact on that is food scraps," Ray says. About 18 percent of the Portland area's garbage sent to landfills is food scraps. The bulk of those food scraps come from commercial, rather than residential, kitchens.

Right now, Ray says, food scraps from some Portland-area businesses, including restaurants and groceries, is taken to JC-Biomethane's anaerobic digester in Junction City. That plant was the first to anaerobically digest food scraps in the Pacific Northwest when it began operations in late 2013.

"But it's one facility, and we need to see where we can have more of those facilities," Ray says.

Siting a facility closer to the urban area where the food waste originates could save money and time.

Metro will be "watching closely" to see whether the facility is well-received by the Wilsonville community, Ray says.

The city of Wilsonville will review SORT's application, ultimately bringing it before the City Council for approval sometime in the spring. If approved, construction on the project could begin in December 2016, clearing the way for it to open in 2018.

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